

CERTIFICATE

No. A/17-629928

Date 2017-01-12 Page 1/2

Rev 00

INSPECTION CERTIFICATE acc to EN 10204 3.1

Processkontroll Items AB Box 2088

444 02 STORA H@GA

SWEDEN

INSPECTION STAMP QA-TUBE

Customer References

Customer

order

2017-01-04

003-00991 ITEMS

754312

Sandvik References

Order No. Subs No. ABSMT Dispatch note

464931 622255 36809/54

ABSMT No. C.Code

300-56999 13

Material description

SEAMLESS STAINLESS COLD FINISHED

INSTRUMENTATION TUBING

Steel/material Designations

Sandvik UNS

2RK65 N08904

Steel making process

Electric furnace

Technical requirements

ASTM A-269-15A

EXTENT OF DELIVERY

 It
 Product designation
 Heat
 Lot
 P

 02
 THT-2RK65-12.7-1.24
 545815
 58811
Kg Pieces M 17 37.0 102.00

12.70 X 1.24

17 37.0 Total 102.00

TEST RESULTS

Chemical composition (weight%)

Heat C Si Mn P \mathtt{Cr} Νi Mo S 1.59 0.022 <0.0005 20.25 545815 0.010 0.42 25.09 4.22

> CuN

545815 0.053 1.35

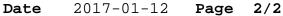
Chemical composition, product (weight%)

Lot C Si Mn P S \mathtt{Cr} Νi Mo 58811 0.012 1.59 0.022 <0.001 20.16 4.23 0.41 25.01

Cu N

58811 1.35 0.049

> Quality assurance - Lars-Ake Bergqvist / QA-manager MTC Service / Certificates





Tensile	test at room temperature		
	Yield strength	Tensile strength	Elongation
	MPa	MPa	%
Lot	Rp0.2	Rm	2"
58811	286	607	49
	292	610	49
	283	599	49

Hardness test

	Min	Max
Lot	HRB	HRB
58811	65	68

Following controls/tests have been satisfactorily performed:

- Flaring test
- PMI-test.
- Leak test: Eddy current test acc to ASTM A-1016.
- Visual inspection and dimensional control.

Heat Treatment:

Solution annealed and quenched.

The raw material is free from radioactive contamination.

Material free from mercury contamination.

The number of tests are based on the size of the manufacturing lot before cutting to finished lengths.

The delivered products comply with the specifications and requirements of the order.

The material is manufactured according to a Quality system, approved and registered to ISO 9001:2008.

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The certificate is produced with EDP and valid without signature.